

THE CLAIMS

1. A carrier and drive arrangement for use in a solar energy reflector system and which comprises:
  - 5 a) a carrier structure having-
    - i) a platform for supporting a reflector element,
    - ii) a frame portion that includes hoop-like end members between which the platform extends and
    - 10 iii) support members which support the frame portion by way of the end members and which accommodate turning of the carrier structure about an axis of rotation that is substantially coincident with a longitudinal axis of the reflector element when supported by the platform; and
  - 15 b) a drive system incorporating an electric motor for imparting turning drive to the carrier structure.
2. The carrier and drive arrangement as claimed in claim 1 wherein the drive system is arranged to impart unidirectional turning drive to the carrier structure by way of one of the end members.
- 20 3. The carrier and drive arrangement as claimed in claim 2 wherein the drive system comprises:
  - a) a link chain that extends around and is fixed to the end member to form, in effect, a gear wheel and
  - 25 b) a sprocket for transferring drive from the electric motor to the link chain.
4. The carrier and drive arrangement as claimed in any one of claims 1 to 3 wherein the platform comprises a panel-like platform  
30 which is formed with stiffening elements in the form of corrugations and wherein the reflector element is supported upon the crests of the corrugations.
5. The carrier and drive arrangement as claimed in any one of  
35 claims 1 to 3 wherein the platform comprises a panel-like platform which is formed with stiffening elements in the form of flutes and wherein the reflector element is supported upon the crests of the flutes.

6. The carrier and drive arrangement as claimed in claim 4 or claim 5 wherein the stiffening elements are orientated to extend in a direction parallel to the longitudinal axis of the reflector element.
- 5 7. The carrier and drive arrangement as claimed in any one of the preceding claims wherein the platform is curved concavely in a direction orthogonal to the longitudinal axis of the reflector element.
- 10 8. The carrier and drive arrangement as claimed in claim 7 wherein the platform is curved with a radius of curvature within the range of 20 to 50 metres.
- 15 9. The carrier and drive arrangement as claimed in claim 7 or claim 8 wherein the reflector element is secured to the platform in a manner such that the curvature of the platform is imparted to the reflector element.
- 20 10. The carrier and drive arrangement as claimed in any one of the preceding claims wherein the reflector element comprises a panel-shaped glass mirror.
- 25 11. The carrier and drive arrangement as claimed in any one of claims 1 to 9 wherein the reflector element comprises a plurality of edge-abutting glass mirrors.
12. The carrier and drive arrangement as claimed in any one of claims 9 to 11 wherein the reflector element is adhered to the platform.
- 30 13. The carrier and drive arrangement as claimed in any one of claims 1 to 12 wherein each of the hoop-shaped end members has a channel-section circumferential portion and a diametrically extending member that is constituted by a transverse frame member of the platform.
- 35 14. The carrier and drive arrangement as claimed in claim 13 wherein the support members comprise spaced-apart supporting rollers

- 10 -

which track within the circumferential portion of associated ones of the end members.

15. A carrier and drive arrangement substantially as shown in the  
5 accompanying drawings and substantially as hereinbefore described  
with reference thereto.